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1                    **§ 101 Rejections**

2                    Claims 1-31 stand rejected under 35 U.S.C. § 101 because, in the Office's  
3                    opinion, "the claimed invention is directed to non-statutory subject matter".  
4                    Specifically, the Office asserts that the rejected claims are not respectively  
5                    directed to producing a "concrete, tangible and useful result" (pages 3-4 of Office  
6                    action). However, Applicant respectfully disagrees with the Office and submits  
7                    that claims 1-31 fully and completely comply with the § 101 standard for  
8                    patentable subject matter.

9                    It is established law that an abstract idea, by itself, is considered to be  
10                    unpatentable subject matter under § 101. See, e.g., AT&T Corp. v. Excel  
11                    Communications, Inc., 172 F.3d 1352, 1355 (1999) (pointing out that laws of  
12                    nature, natural phenomena, and abstract ideas have generally been identified by  
13                    the Supreme Court as unpatentable subject matter). However, if such an idea is  
14                    taken out of the abstract and employed in a process that achieves a "new and  
15                    useful end", the *process is* patentable subject matter, even if the idea by itself  
16                    would not be. Id. at 1357. Thus, the relevant inquiry under § 101 becomes -- Is  
17                    the idea being applied to achieve a useful end? Id. If so, then the § 101 threshold  
18                    is satisfied. Id.

19                    In AT&T, the invention was designed to operate in a telecommunications  
20                    system with multiple long-distance service providers. The system contained local  
21                    exchange carriers ("LECs") and long-distance service (interexchange) carriers  
22                    ("IXCs"). The LECs provided local telephone service and access to IXCs. Each  
23                    customer had an LEC for local service and selected an IXC, such as AT&T or  
24                    Excel, to be its primary long-distance service (interexchange) carrier or PIC. The  
25                    system involved a three-step process when a caller made a direct-dialed (1+) long-

1 distance telephone call: (1) after the call was transmitted over the LEC's network  
2 to a switch, and the LEC identified the caller's PIC, the LEC automatically routed  
3 the call to the facilities used by the caller's PIC; (2) the PIC's facilities carried the  
4 call to the LEC serving the call recipient; and (3) the call recipient's LEC  
5 delivered the call over its local network to the recipient's telephone.

6 When a caller made a direct-dialed long-distance telephone call, a switch  
7 (which could be a switch in the interexchange network) monitored and recorded  
8 data related to the call and generated an "automatic message account" ("AMA")  
9 message record. This contemporaneous message record contained fields of  
10 information such as the originating and terminating telephone numbers, and the  
11 length of time of the call. These message records were then transmitted from the  
12 switch to a message accumulation system for processing and billing.

13 Because the message records were stored in electronic format, they could  
14 be transmitted from one computer system to another and reformatted to ease  
15 processing of the information. Thus the carrier's AMA message subsequently was  
16 translated into the industry-standard "exchange message interface," forwarded to a  
17 rating system, and ultimately forwarded to a billing system in which the data  
18 resided until processed to generate, typically, "hard copy" bills which were mailed  
19 to subscribers.

20 The invention at issue in this case called for the addition of a data field into  
21 a standard message record to indicate whether a call involves a particular PIC (the  
22 "PIC indicator"). This PIC indicator could exist in several forms, such as a code  
23 which identified the call recipient's PIC, a flag which showed that the recipient's  
24 PIC was or was not a particular IXC, or a flag that identified the recipient's and the  
25

1 caller's PICs as the same IXC. The PIC indicator therefore enabled IXCs to  
2 provide differential billing for calls on the basis of the identified PIC.

3 One of the claims at issue -- claim 1-- read as follows:

4  
5 A method for use in a telecommunications system in which  
6 interexchange calls initiated by each subscriber are automatically routed  
7 over the facilities of a particular one of a plurality of interexchange carriers  
8 associated with that subscriber, said method comprising the steps of:

9 generating a message record for an interexchange call between an  
10 originating subscriber and a terminating subscriber, and

11 including, in said message record, a primary interexchange carrier  
12 (PIC) indicator having a value which is a function of whether or not the  
13 interexchange carrier associated with said terminating subscriber is a  
14 predetermined one of said interexchange carriers.

15  
16 In looking at the subject matter of this claim and finding the claim to pass  
17 muster under 35 U.S.C. § 101, the Court looked to the *specification* and  
18 commented as follows:

19  
20 In this case, Excel argues, correctly, that the PIC indicator value is  
21 derived using a simple mathematical principle (p and q). But that is not  
22 determinative because AT&T does not claim the Boolean principle as such  
23 or attempt to forestall its use in any other application. It is clear from the  
24 written description of the '184 patent that AT&T is only claiming a process  
25 that uses the Boolean principle in order to determine the value of the PIC  
indicator. The PIC indicator represents information about the call  
recipient's PIC, a useful, non-abstract result that facilitates differential  
billing of long-distance calls made by an IXC's subscriber. Because the  
claimed process applies the Boolean principle to produce a useful, concrete,  
tangible result without pre-empting other uses of the mathematical  
principle, on its face the claimed process comfortably falls within the scope  
of § 101.

1 Here, the Court looked at the specification and found that the environment  
2 and use of the PIC indicator – that of providing differential billing – provided a  
3 useful, concrete and tangible result. That result, however, was not specifically  
4 recited in the claim. Rather, it was described in the specification.

5 Likewise, in the present case, the specification provides a description of the  
6 utility and tangibility of the recited subject matter. Specific sections of the  
7 specification are excerpted below to further illustrate this point:

8  
9 The mechanisms and techniques described in this document are  
10 directed to a journal that allows a navigation-based application to store and  
11 restore state of a resource that is programmatically altered. A resource may  
12 invoke code that creates and stores an entry in the journal. The entry  
13 includes sufficient information to restore the resource from one state to its  
14 prior state. In addition, the entry includes a mechanism for creating another  
15 entry to undo any changes made by the first entry. In this manner, the  
16 journal includes both entries that identify navigations from one resource to  
17 another, and entries may be added to undo changes to a resource to restore  
18 the resource to a prior state. Specification at page 2, line 21 to page 3,  
19 line 2.

20 What follows is a detailed description of one embodiment of a  
21 system for journaling non-navigation related activities to enable a user to  
22 easily navigate backward and forward not only through actual distinct  
23 resources that the user has visited, but also different states of a resource. It  
24 will be appreciated that the invention is not limited to the described  
25 embodiments alone, and that alternatives will become apparent to those  
skilled in the art. Specification at page 3, lines 14-19 (as replaced).

Accordingly, in these excerpts as throughout the document, it is evident  
that the claimed subject matter has a specifically described useful, concrete and  
tangible result and application.

1 In view of the above discussion, Applicant respectfully submits that claims  
2 1-31, as respectively amended, comply with the patentability requirements of §  
3 101 and that the § 101 rejections should be withdrawn.

#### 4 5 § 102 Rejections

6 Claims 1-31 stand rejected under 35 U.S.C. § 102(e) as being anticipated  
7 by U.S. Patent Application Publication No. 2004/0205574 ("Sayers").

#### 8 9 The Claims

10 **Claim 1** recites a system for managing changes in state of a navigation-  
11 based application, comprising:

- 12
- 13 • a journal engine for maintaining a journal, the journal being  
14 associated with a container that navigates to and hosts a  
15 resource, the resource including a mechanism for causing to be  
16 stored in the journal a journal entry that includes information  
17 about a change in state of the resource, the journal entry being  
18 operative to restore the resource to the state prior to the change.  
19 [Emphasis added.]

20 In making out the rejection of this claim, the Office argues that its subject  
21 matter is anticipated by Sayers. Applicant respectfully disagrees and traverses the  
22 Office's rejection. For the reasons set forth below, the Sayers does not anticipate  
23 the subject matter of this claim.

24 Specifically, Sayers fails to provide a journal engine for maintaining a  
25 journal, the journal being associated with a container that navigates to and hosts a  
resource, the resource including a mechanism for causing to be stored in the  
journal a journal entry that includes information about a change in state of the

1 resource, the journal entry being operative to restore the resource to the state prior  
2 to the change, as recited by the subject matter of claim 1.

3 Specifically, Sayers is directed to the provision of information and  
4 software-like functionality to one or more users by way of respective document  
5 agents (120). Each document agent (120) is generally autonomous and, once  
6 created, is configured to keep track of its own data, code and state as such  
7 characteristics change during user interaction. Document agents (120) can be  
8 saved in memory (220) of a server (210) so that a user can cease operations and, at  
9 some time in the future, resume use of the corresponding document agent (120) at  
10 the point (data, status, etc.) where they left off (Abstract; Paragraphs 0021, 0025  
11 and 0028; and Figs. 2-3 of Sayers). Thus, Sayers is directed to enabling Web-  
12 accessible information and functionality such that users can leave off (i.e., quit) at  
13 some arbitrary point, and return to that point (information, form, etc.) in the future.

14 However, and despite the Offices assertions to the contrary (page 5 of  
15 Office action), Sayers make no provision directed to a journal entry, or any other  
16 means, that includes information about a change in state of a resource, wherein  
17 such a journal entry is operative to restore the resource to the state prior to the  
18 change, as recited by the subject matter of this claim. Sayers expresses no concern  
19 whatsoever for any ability or desire to restore a resource (or anything else) to a  
20 prior state. To the contrary, Sayers is content with the capacity to return each  
21 user to the point where they left off – Sayers is not concerned with the ability to  
22 return a user to a *previous* state in their sequence of interactions. The provisions  
23 of Sayers are not the same as the subject matter of claim 1.

24 For at least the forgoing reasons, the Applicant asserts that the § 102  
25

1 rejection of claim 1 over Sayers is unsupportable and must be withdrawn. The  
2 Applicant further asserts that claim 1 is allowable.

3 **Claims 2-9** are allowable at least by virtue of their dependence from an  
4 allowable base claim, as well as for their own respectively patentable subject  
5 matter.

6 **Claim 10** recites a computer-readable medium having computer executable  
7 components for managing changes in state of a navigation-based application,  
8 comprising:

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- 10
- 11 • a resource including a mechanism for altering a state of the resource  
from a first state to a second state; and
- 12 • a description of a journal entry having a method for restoring  
13 the resource from the first state to the second state, the method  
14 being further configured to create a second journal entry to  
undo the restoration of the resource from the first state to the  
second state.

15 [Emphasis added]

16

17 In making out the rejection of this claim, the Office argues that its subject  
18 matter is anticipated by Sayers. Applicant respectfully disagrees and traverses the  
19 Office's rejection. For the reasons set forth below, the Sayers does not anticipate  
20 the subject matter of this claim.

21 Specifically, Sayers fails to provide a description of a journal entry having  
22 a method for restoring the resource from the first state to the second state, the  
23 method being further configured to create a second journal entry to undo the  
24 restoration of the resource from the first state to the second state, as recited by the  
25



1 subject matter of claim 10.

2 More to the point, Sayers provides no method or means to undo the  
3 restoration of the resource from the first state to the second state, as recited in  
4 claim 10. Furthermore, Sayers provides no **journal entries** of any kind, let alone  
5 the respective (i.e., first and second) journal entries as recited by the subject matter  
6 of claim 10. Again and substantially as argued above in regard to claim 1, Sayers  
7 is directed to returning a user, at some time in the future, to the point where they  
8 halted Web-based processing, and nothing more.

9 For at least the forgoing reasons, the Applicant asserts that the § 102  
10 rejection of claim 10 over Sayers is unsupported and must be withdrawn. The  
11 Applicant further asserts that claim 10 is allowable.

12 **Claims 11-13** are allowable at least by virtue of their dependence from an  
13 allowable base claim, as well as for their own respectively patentable subject  
14 matter.

15 **Claim 14** recites a computer-readable medium encoded with a data  
16 structure, the data structure comprising:

- 17
- 18 • **a journal entry having a Replay method, the Replay method**  
19 **being configured to restore a resource from a first state to a**  
20 **second state, the Replay method being further configured to**  
21 **create a second journal entry to restore the resource from the**  
22 **second state to the first state.**

[Emphasis added.]

23 In making out the rejection of this claim, the Office argues that its subject  
24 matter is anticipated by Sayers. Applicant respectfully disagrees and traverses the  
25

Office's rejection. For the reasons set forth below, the Sayers does not anticipate the subject matter of this claim.

Specifically, Sayers fails to provide a journal entry having a Replay method, the Replay method being configured to restore a resource from a first state to a second state, the Replay method being further configured to create a second journal entry to restore the resource from the second state to the first state, as recited by the subject matter of claim 14.

Specifically, Sayers is not concerned with a **Replay method, a journal entry, or anything** configured to restore a resource from a first state to a second state and restore the resource from the second state to the first state.

For at least the foregoing reasons, and for reasons analogous to those argued above in regard to claims 1 and 10, the Applicant asserts that the § 102 rejection of claim 14 is unsupportable and must be withdrawn. The Applicant asserts that claim 14 is allowable.

**Claims 15-20** are allowable at least by virtue of their dependence from an allowable base claim, as well as for their own respectively patentable subject matter.

**Claim 21** recites a software architecture for managing changes in state of a navigation-based application, comprising:

- **an internal system that supports the maintenance of entries in a journal, the journal being operative to maintain state information related to navigations among resources in a navigation-based application; and**

- a set of interfaces that support the inclusion of entries in the journal, the journal entries being related to non-navigation activity.

[Emphasis added.]

In making out the rejection of this claim, the Office argues that its subject matter is anticipated by Sayers. Applicant respectfully disagrees and traverses the Office's rejection. For the reasons set forth below, the Sayers does not anticipate the subject matter of this claim.

Specifically, Sayers fails to provide an internal system that supports the maintenance of entries in a journal, the journal being operative to maintain state information related to navigations among resources in a navigation-based application, as recited by the subject matter of this claim. Also, Sayers fails to provide a set of interfaces that support the inclusion of entries in the journal, the journal entries being related to non-navigation activity as recited by the subject matter of this claim.

Specifically, Sayers is not concerned with a **journal** or **journal entries** as those respective terms are used in the subject matter of claim 21. Rather, Sayers is directed to respective document agents (120) that function as autonomous entities, and which are viewable and/or interactive with a user by way of a web-browser (140) (Abstract; Figs 1-3 of Sayers). Sayers further provides that such respective document agents (120) can be saved on a server (210) (*Id.*). However, such document agents of Sayers are not equivalent to "journals", despite the erroneous assertion by the Office to the contrary (page 7 of Office action). Again, Sayers considers and treats document agents as whole, autonomous entities and makes no suggestion as to any hierarchically association between them, or of the elements

1 within them (paragraph 0028 of Sayers).

2 In contrast, the language of claim 21 explicitly provides that **journal**  
3 **entries** are maintained (i.e., stored) **in a journal**, such that a natural hierarchy is  
4 inherent to these respective elements. This is because the journal and journal  
5 entries of the subject matter of claim 21 are directed to a different purpose and  
6 functionality than the document agents of Sayers. Namely, Sayers is concerned  
7 with returning each particular user, at some point in the future, to the same point in  
8 Web page interaction where they left off. Conversely, the subject matter of claim  
9 21 is directed to maintaining navigation-related state information and entries  
10 related to non-navigation activities, as respective (i.e., distinct and separately  
11 purposeful) journal entries, within a journal.

12 For at least the foregoing reasons, the Applicant asserts that the § 102  
13 rejection of claim 21 is unsupportable and must be withdrawn. The Applicant also  
14 asserts that claim 21 is allowable.

15 **Claims 21-28**, as respectively amended, are allowable at least by virtue of  
16 their dependence from an allowable base claim, as well as for their own  
17 respectively patentable subject matter.

18 **Claim 29** recites a computer-readable medium encoded with computer-  
19 executable instructions, comprising:  
20

- 21 • receiving a notification to add a journal entry to a journal, the  
22 journal entry being associated with a resource, the journal entry  
23 including sufficient information to restore the resource from a  
24 first state to a second state, the first state being associated with a  
25 first set of characteristics of the resource, the second state being  
associated with a second set of characteristics of the resource;  
and

- adding the journal entry to the journal.  
[Emphasis added.]

In making out the rejection of this claim, the Office argues that its subject matter is anticipated by Sayers. Applicant respectfully disagrees and traverses the Office's rejection. For the reasons set forth below, the Sayers does not anticipate the subject matter of this claim.

Specifically, Sayers fails to provide receiving a notification to add a journal entry to a journal, the journal entry being associated with a resource, the journal entry including sufficient information to restore the resource from a first state to a second state, the first state being associated with a first set of characteristics of the resource, the second state being associated with a second set of characteristics of the resource, as recited by the subject matter of this claim.

More particularly, Sayers fails to provide anything related to adding a **journal entry to a journal**. As explicitly provided in claim 29, a (i.e., each) journal entry includes information to restore the resource associated therewith from a first state to a second state. Sayers is not concerned with restoration of a resource between first and second states – Sayers is concerned with preserving information about where a user left off. Put another way, Sayers is directed to providing a single “bookmark” in time as to a user's status within a Web-based interaction. This is not the same as the subject matter recited by claim 29.

For at least the foregoing reasons, the Applicant asserts that rejection of claim 29 for anticipation over Sayers in unsupportable and must be withdrawn. The Applicant asserts that claim 29 is allowable.


1       **Claims 30-31** are allowable at least by virtue of their dependence from an  
2 allowable base claim, as well as for their own respectively patentable subject  
3 matter.

4       **Conclusion**

5       All of the claims 1-31, as respectively amended, are in condition for  
6 allowance. Accordingly, Applicant requests a Notice of Allowability be issued  
7 forthwith. If the Office's next anticipated action is to be anything other than  
8 issuance of a Notice of Allowability, Applicant respectfully requests a telephone  
9 call for the purpose of scheduling an interview.

10  
11                               Respectfully Submitted,

12  
13       Dated: 10/3/06

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